

CLAIMS

1. (Currently Amended) A method for fault management in a distributed network management station comprising:
initiating a first device coupled to a network;
determining a status of the first device as a master device of the network or a slave device of the network by:

broadcasting, from the first device, an information packet over the network, the information packet indicating whether the first device had a prior status as a master device in a previous operational period,

listening, at the first device, for one or more responses to the information packet from one or more second devices coupled to the network, the one or more responses indicating a current state of the corresponding second devices as either master or slave devices of the network, and a prior status of the corresponding second devices as master devices in previous operational periods, and

resolving the status of the first device as the master device or slave device of the network based, at least in part, on any responses received from the one or more second devices coupled to the network.

2. (Currently Amended) The method as recited in Claim 1, wherein said first device automatically initiates as a slave device.

3. (Original) The method as recited in Claim 1, wherein said information packet comprises a participating-device internet protocol (IP) of said first device.

4. (Original) The method as recited in Claim 3, wherein said information packet also comprises a participating-device message authentication code (MAC) of said first device.

5. (Previously Presented) The method as recited in Claim 1, further comprises determining the first device is the master of the network when no responses were received to the information packet.

6. (Currently Amended) The method as recited in Claim 1, wherein said information packet additionally comprises information regarding a current state of said first device as a slave device of the network[[]]; and

determining the first device is the master device of the network based, at least in part, on any responses received from the one or more second devices coupled to the network.

7. (Currently Amended) The method as recited in Claim 1, further comprises: comparing the prior status of the first device with the prior status of the one or more second devices received in the response to the information packet when one of the second devices is not currently the master device of the network according to the received responses; and

determining the first device is the master device of the network or a slave device of the network according to the comparison of the prior status of the first device with the prior status of the one or more second devices.

8. (Currently Amended) The method as recited in Claim 1 [[7]], wherein the information packet further comprises information regarding a total system-up-time of the first device and the responses indicate information regarding corresponding total system-up-times of the one or more second devices, the total system-up-times of the first device and the one or more second devices to indicate a total time the corresponding first device or one or more second devices have been in an operational mode;

comparing the total system-up-times of the first device and the one or more second devices ~~when the master device of the network could not be determined from the comparison of the prior status of the first device with the prior status of the one or more second devices;~~

determining the first device is the master device of the network or a slave device of the network according to the comparison of the total system-up-times.

9. (Original) The method as recited in Claim 1, wherein said distributed network management station integrates plug-and-play capability of each of the plurality of devices into said network.

10. (Original) The method as recited in Claim 1, wherein said distributed network management station integrates scalability of each of the plurality of devices into said network.

11. (Original) The method as recited in Claim 1, wherein said distributed network management station integrates self-healing capabilities of each of the plurality of devices into said network.

12. (Currently Amended) A method for fault management in a distributed network management station comprising:

~~initiating a first device coupled to a network;~~

determining a status of ~~the a~~ first device as a master device of ~~the a~~ network or a slave device of the network by:

broadcasting, from the first device, an information packet over the network, the information packet indicating whether the first device had a prior status as a master device in a previous operational period,

listening, at the first device, for one or more responses to the information packet from one or more second devices coupled to the network, the one or more responses indicating a current state of the corresponding second devices as either master or slave devices of the network, and a prior status of the corresponding second devices as master devices in previous operational periods, and

resolving the status of the first device as the master device or slave device of the network based, at least in part, on any responses received from the one or more second devices coupled to the network; and

initiating a fail-over process, wherein said fail-over process results in at least one of said slave secondary devices re-evaluation of re-evaluating which device coupled to the network is said master device.

13. (Previously Presented) The method as recited in Claim 12, wherein said information packet broadcast by said first device further comprises:

transmitting a participating-device internet protocol (IP) of said first device; transmitting a participating-device message authentication code (MAC) of said first device;

transmitting information regarding the previous state of said first device; transmitting information regarding the current state of said first device; and transmitting information regarding the total system-up-time of said first device.

14. (Currently Amended) The method as recited in Claim 12, wherein the information packet further comprises information regarding a total system-up-time of the first device and the responses indicate information regarding corresponding total system-up-times of the one or more second devices, the total system-up-times of the first device and the one or more second devices to indicate a total time the corresponding first device or one or more second devices have been in an operational mode;

comparing the total system-up-times of the first device and the one or more second devices;

determining the first device is the master device of the network or a slave device of the network according to the comparison of the total system-up-times.

15. (Original) The method as recited in Claim 12, wherein said distributed network management station integrates plug-and-play capability of each of the plurality of devices into said network.

16. (Original) The method as recited in Claim 12, wherein said distributed network management station integrates scalability of each of the plurality of devices into said network.

17. (Original) The method as recited in Claim 12, wherein said distributed network management station integrates self-healing capabilities of each of the plurality of devices into said network.

18. (Currently Amended) The method as recited in Claim 12, wherein said ~~secondary~~ devices re-evaluation by the slave device occurs due to a loss of communication with said master device.

19. (Currently Amended) The method as recited in Claim 18, wherein said ~~secondary devices re-evaluation by the slave device~~ comprises questioning said master device for state or status.

20. (Currently Amended) The method as recited in Claim 19, wherein said state or status of said master device comprise at least one of said master device in a paused state, said master device in a crashed state, transmission control protocol (TCP) disconnect from said master device, and or overall loss of master device.

21. (Currently Amended) A computer system comprising:
a bus;
a memory unit coupled to ~~said the~~ bus; and
a processor coupled to ~~said the~~ bus, ~~said the~~ processor ~~to for managing faults in a distributed network management station that comprises:~~ broadcast an information packet over a network, the information packet indicating whether the computer system had a prior status as a master device in a previous operational period, to listen for one or more responses to the information packet from at least another device coupled to the network, the one or more responses indicating a current state of the corresponding other device as either master or slave device of the network, and a prior status of the corresponding other device as a master device in previous operational periods, and to resolve the status of the computer system as the master device or slave device of the network based, at least in part, on any responses received from the other device coupled to the network

a first device coupled to a network, said first device initiating as a secondary device;
an information packet describing said first device broadcast from said first device to a plurality of devices coupled to the network, the information packet indicating whether the first device had a prior status as a master device;

responses to said information packet, said responses broadcast from one or more of said devices, the one or more responses indicating a current state of the corresponding devices as either master or slave devices of the network, and a prior status of the corresponding devices as master devices;

said master device and at least one secondary device, wherein said master device is at least one of said first device and said devices, wherein said master device is defined based, at least in part, on said information packet and said responses; and

a fail-over process, wherein said fail-over process results in said secondary device re-evaluating said master device.

22. (Currently Amended) The computer system of Claim 21, wherein said information packet comprises at least one of [::] a participating-device internet protocol (IP) of said computer system first device; a participating-device message authentication code (MAC) of said computer system first device; information regarding the previous state of said first device; information regarding the current state of said first device; or and information regarding the total system-up-time of said first device.

23. (Currently Amended) The computer system of Claim 21, wherein the processor is configured to said status between said first device and said plurality of devices is resolved by said first device evaluating evaluate each at least one said information packet from the other device to resolve the status of the computer system as the master device or slave device of the network, said first device and any of said plurality of devices wherein the information packet further comprises information regarding a total system-up-time of the computer system and the responses indicate information regarding corresponding total system-up-time of the other device, the total system-up-times of the computer system and the other device to indicate a total time the computer system or other device have been in an operational mode, the processor to compare the total system-up-times of the computer system and the other device and determine the computer system is the master device of the network or the slave device of the network according to the comparison of the total system-up-times.

24. (Currently Amended) The computer system of Claim 21, wherein said distributed network management station comprises at least one of [::] plug-and-play capability of said computer system first device; scalability of said computer system first device; and or self-healing capability of said computer system first device.

25. (Currently Amended) The computer system of Claim 21, wherein the processor is configured to re-evaluate the status of the computer system as the master device or slave device of the network when the computer system, as a slave device, loses said secondary device re-evaluating said master device due to a loss of communication with said the master device.

26. (Currently Amended) The computer system of Claim 21 [[25]], wherein the processor configured to resolve the status of the computer system by: said secondary device re-evaluating comprises questioning said master device for state or status
comparing the prior status of the computer system with the prior status of the other
device received in the response to the information packet, and
determining the first device is the master device of the network or the slave device of the network according to the comparison.

27. (Currently Amended) The computer system of Claim 26, wherein said state or status of said master device comprise at least one of:

- a paused state;
- a crashed state;
- a transmission control protocol (TCP) disconnect; or and
- overall loss of master device.

28. (Currently Amended) A computer-usable storage medium having computer-readable program code embodied therein for causing a computer system to perform ~~a method for~~ fault management in a distributed network management station that comprises:

~~initiating a first device coupled to a network;~~
~~determining a status of the first device as a master device of the network or a slave device of the network by:~~

broadcasting, from the a first device, an information packet over the a network, the information packet indicating whether the first device had a prior status as a master device in a previous operational period: [[.]]

listening, at the first device, for one or more responses to the information packet from one or more second devices coupled to the network, the one or more responses indicating a current

state of the corresponding second devices as either master or slave devices of the network, and a prior status of the corresponding second devices as master devices in previous operational periods:[,] and

resolving the status of the first device as the master device or slave device of the network based, at least in part, on any responses received from the one or more second devices coupled to the network.

29. (Previously Presented) The computer-usable storage medium of Claim 28, wherein said first device initiates as a slave device.

30. (Original) The computer-usable storage medium of Claim 28, wherein said information packet comprises a participating-device internet protocol (IP) of said first device.

31. (Original) The computer-usable storage medium of Claim 30, wherein said information packet also comprises a participating-device message authentication code (MAC) of said first device.

32. (Previously Presented) The computer-usable storage medium of Claim 28, further comprises determining the first device is the master of the network when no responses were received to the information packet.

33. (Previously Presented) The computer-usable storage medium of Claim 28, wherein said information packet additionally comprises information regarding a current state of said first device as a slave device of the network; and

determining the first device is the master device of the network based, at least in part, on any responses received from the one or more second devices coupled to the network.

34. (Previously Presented) The computer-usable storage medium of Claim 28, further comprises:

comparing the prior status of the first device with the prior status of the one or more second devices received in the response to the information packet when one of the second

devices is not currently the master device of the network according to the received responses;
and

determining the first device is the master device of the network or [[a]] the slave device
of the network according to the comparison of the prior status of the first device with the prior
status of the one or more second devices.

35. (Currently Amended) The computer-usable storage medium of Claim 28 [[34]],
wherein the information packet further comprises information regarding a total system-
up-time of the first device and the responses indicate information regarding corresponding total
system-up-times of the one or more second devices, the total system-up-times of the first device
and the one or more second devices to indicate a total time the corresponding first device or one
or more second devices have been in an operational mode;

comparing the total system-up-times of the first device and the one or more second
devices ~~when the master device of the network could not be determined from the comparison of~~
~~the prior status of the first device with the prior status of the one or more second devices;~~

determining the first device is the master device of the network or [[a]] the slave device
of the network according to the comparison of the total system-up-times.

36. (Original) The computer-usable storage medium of Claim 28, wherein said
distributed network management station integrates plug-and-play capability of said first device
into said network.

37. (Original) The computer-usable storage medium of Claim 28, wherein said
distributed network management station integrates scalability of said first device into said
network.

38. (Original) The computer-usable storage medium of Claim 28, wherein said
distributed network management station integrates self-healing capabilities of said first device
into said network.

39. (Currently Amended) A ~~system mechanism for creating a distributed network management station~~ comprising:

~~means for initiating a first device coupled to a network;~~

~~means for broadcasting, from the a first device, an information packet over the a network, the information packet indicating whether the first device had a prior status as a master device in a previous operational period;~~

~~means for listening, at the first device, for one or more responses to the information packet from one or more second devices coupled to the network, the one or more responses indicating a current state of the corresponding second devices as either master or slave devices of the network, and a prior status of the corresponding second devices as master devices in previous operational periods; and~~

~~means for resolving the status of the first device as the master device or slave device of the network based, at least in part, on any responses received from the one or more second devices coupled to the network.~~

40. (Currently Amended) The ~~system mechanism for creating a distributed network management station as described in~~ of Claim 39, wherein said first device initiates as a ~~secondary slave~~ device.

41. (Currently Amended) The ~~system mechanism for creating a distributed network management station as described in~~ of Claim 39, wherein said information packet comprises a means for participating-device internet protocol (IP) of said first device.

42. (Currently Amended) The ~~system mechanism for creating a distributed network management station as described in~~ of Claim 41, wherein said information packet also comprises a means for a participating-device message authentication code (MAC) of said first device.

43. (Currently Amended) The ~~system mechanism for creating a distributed network management station as described in~~ of Claim 39, further comprising means for determining the first device is the master of the network when no responses were received to the information packet.

44. (Currently Amended) The ~~system mechanism for creating a distributed network management station as described in~~ of Claim 39, wherein said information packet additionally comprises means for providing information regarding a current state of said first device; and means for determining the first device is the master device of the network based, at least in part, on any responses received from the one or more second devices coupled to the network.

45. (Currently Amended) The ~~system mechanism for creating a distributed network management station as described in~~ of Claim 39, further comprising:

means for comparing the prior status of the first device with the prior status of the one or more second devices received in the response to the information packet when one of the second devices is not currently the master device of the network according to the received responses;

means for determining the first device is the master device of the network or ~~[[a]]~~ the slave device of the network according to the comparison of the prior status of the first device with the prior status of the one or more second devices.

46. (Currently Amended) The ~~system mechanism for creating a distributed network management station as described in~~ of Claim 39,

wherein the information packet further comprises information regarding a total system-up-time of the first device and the responses indicate information regarding corresponding total system-up-times of the one or more second devices;

means for comparing the total system-up-times of the first device and the one or more second devices ~~when the master device of the network could not be determined from the comparison prior status of the first device with the prior status of the one or more second devices;~~

means for determining the first device is the master device of the network or ~~[[a]]~~ the slave device of the network according to the comparison of the total system-up-times.

47. (Currently Amended) The ~~system mechanism for creating a distributed network management station as described in~~ of Claim 39, wherein said distributed network management

station comprises a means for integrating plug-and-play capability of said first device into said network.

48. (Currently Amended) The system ~~mechanism for creating a distributed network management station as described in~~ of Claim 39, wherein said distributed network management station comprises a means for integrating scalability of said first device into said network.

49. (Currently Amended) The system ~~mechanism for creating a distributed network management station as described in~~ of Claim 39, wherein said distributed network management station comprises a means for integrating self-healing capabilities of said first device into said network.